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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,567	06/20/2003	Graham Hume	PINE-001	9640

7590 10/09/2007  
WAGNER, MURABITO & HAO LLP  
Third Floor  
Two North Market Street  
San Jose, CA 95113

EXAMINER
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CROUSE, BRETT ALAN

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/600,567	<b>Applicant(s)</b> HUME, GRAHAM	
	<b>Examiner</b> Brett A. Crouse	<b>Art Unit</b> 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2007.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-9 is/are rejected.  
 7) ☒ Claim(s) 3-9 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This office action is in response to the amendment filed 19 July 2007, which amends claim 2. Claims 1-9 are pending.

#### ***Response to Amendment***

Applicant's arguments, filed 19 July 2007, with respect to the rejections of:  
claims 1-4 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Quinn, US 1,939,082;  
claim 5 under 35 U.S.C. 103(a) as being unpatentable over Quinn, US 1,939,082 as applied to claims 1-4 above; and  
claims 6-9 under 35 U.S.C. 103(a) as being unpatentable over Quinn, US 1,939,082, as applied to claims 1-4 above, and further in view of Brown, US 1,860,134, have been fully considered and are persuasive. Therefore, the rejections have been withdrawn.

#### ***Claim Objections***

Claims 3-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 stand rejected under 35 U.S.C. 102(b) as being anticipated by Edwards, US 1,778,147 herein after known as Edwards. The rejection is maintained for reasons of record.

### ***Response to Arguments***

Applicant's arguments, filed 19 July 2007, with respect to the rejection of claims 1 and 2 under 35 U.S.C. 102(b) as being anticipated by Edwards, US 1,778,147, have been fully considered but they are not persuasive.

Applicant argues that Edwards fails to teach or suggest the limitation of “creating a water-based slurry comprising suspended boron salt particles” of claim 1. Applicant additionally argues that Edwards fails to teach or suggest the limitation of “introducing said water-based slurry to said ligneous material” of claim 1. Applicant additionally argues that calcium borate is not a boron salt as embodied by the claims.

The examiner respectfully disagrees. With respect to calcium borate, claims 1 and 2 do not recite a material limitation that excludes calcium as the cationic species of the boron salt. It is not until claim 3 that borax pentahydrate, the sodium salt, is recited, thus introducing sodium as the cationic species. With respect to the argument that Edwards fails to teach or suggest the limitation of “creating a water-based slurry comprising suspended boron salt particles” and “introducing said water-based slurry to said ligneous material” applicant is directed to page 2, lines 33-59 of Edwards. Edwards acknowledges that calcium meta-borate is a salt and teaches the separation of the calcium meta-borate from the other salts present. Edwards then teaches that

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the precipitate can be added to the pulp suspended in a small amount of water. The formula presented in the passage indicates that the water is previously saturated with calcium meta-borate, thus the additional calcium meta-borate will not go into solution, thus acting as suspended particles.

Alternatively, the calcium borate can be produced in situ allowing the formation of the slurry of calcium borate separately from the adhesive addition as discussed in the previous office action.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brett A. Crouse whose telephone number is 571-272-6494. The examiner can normally be reached on Monday - Friday 6:00AM - 2:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BAC, 1 October 2007



MILTON I. CANO  
SUPERVISORY PATENT EXAMINER